Daily GLOWBUGS

Digest: V1 #77

via AB4EL Web Digests @ SunSITE

Purpose: building and operating vacuum tube-based QRP rigs

[AB4EL Ham Radio Homepage @ SunSITE]

%%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%%

Subject: glowbugs V1 #77
glowbugs Thursday, July 17 1997 Volume 01 : Number 077

Date: Wed, 16 Jul 1997 13:45:26 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: 812 what do to???

> I came across this 812 at a hamfest and it followed me home! Nice 4 amp
> filament! Any idea's what I might do with it, if it works? If it don't?

Well, it would make a fair Hartley oscillator, or a fair to good lowendian amplifier for about 50 watts or so. I kindof am partial to Hartleys.....

Bob/NA4G

Date: Wed, 16 Jul 1997 11:31:16 -0700 (PDT)
From: Ken Gordon <keng@uidaho.edu>
Subject: Re: A 75 watt transformer for ten bucks

> It's nominally a step-down from either 480 or 240 to 120V, but I know
> things like that can be used "backwards." However, the writeup implies
> that the high-voltage side is three-phase.

In my experience, if the "high-voltage side is three-phase" then the "low voltage" side has to be also. In which case there would be three windings on each side, although they could be wired so that you had only three (delta, but this would be stupid to do) or four (star) wires out.

Are you sure it isn't one phase of a three phase unit?

I have seen transformers listed which were 110 to 480 VAC but meant to be used in threes. It is impossible to get three-phase voltage out of a single phase/single-winding transformer.

>
> I'm ignorant of three-phase power theory. Assuming you get three-phase AC
> out of the 480V winding, what does that imply for a rectifier circuit?

Simply that you would need three rectifier circuits to get your DC. They
would be connected to any two of the wires out.

Ken W7EKB

Date: Wed, 16 Jul 1997 20:19:29 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: A 75 watt transformer for ten bucks

> Another boring KG7JF catalog report. The new Surplus Center (formerly
> Burden's Surplus Center) flyer lists a transformer rated 75 watts output.
> It's nominally a step-down from either 480 or 240 to 120V, but I know
> things like that can be used "backwards." However, the writeup implies
> that the high-voltage side is three-phase.
>
> I'm ignorant of three-phase power theory. Assuming you get three-phase AC
> out of the 480V winding, what does that imply for a rectifier circuit? The
> transformer lists for $9.99. (Item 15-1093.) At a price like that it
> would be worth some fooling around, as I'm certain you could run a 50w
> input sweep tube rig off a 75 watt transformer.
>
> Any thoughts?

What that is is an industrial instrumentation isolation transformer.
They come in sizes from about 25va to several kva. They make perfectly
fine transformers for B+ in the 500-700 volt range if you pick the
windings correctly. They are often labelled or have industrial code
labelings on the H1, H2, H3, H4, and X1, X2, X3, X4 or something like
that. I have several that I have been hanging onto for larger Hartley
projects.

The 240/480 windings are seriesed and the 110/220 windings are paralleled.

A Brute Force full wave bridge out of a sillycon rectifier bridge or a
voltage doubler circuit will work well. For an 807 or the like, a bridge
would be best. From 480vdc into a capacitor or a pi-net filter you
ought to get about 600 volts or a little more output at rated load.
That is perfect for an 807ish style puffer, or an 812 Hartley, or.......

Bob Keys/NA4G

Date: Wed, 16 Jul 1997 21:38:03 -0700
From: Adam Liette <kb8ydx@geocities.com>
Subject: 7117KHz at abt 9pm tonite

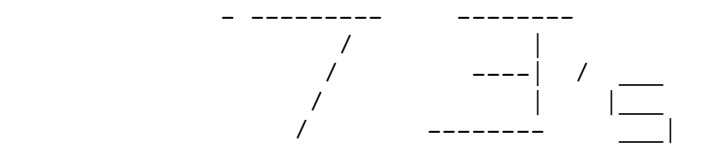
Hi everybody! Sorry to who ever (on the list) heard my CQ's and didn't get
an answer. I was hearing the SW station (abt 7125) abt
20 over and had a terrible time hearing anyone on CW.
I don't even know who was trying to answer me. The most I ever

got out of anyone's transmissions was my call and the DE then nothing after.

So, maybe try again when the QRM (and QRN) aren't so high.
Like I've said before, 7117 is GREATLY effected by BC stations.
I hope no ones bought rocks for that one. I can't hear anyone at all.

Well, 73 and Thanks to those who tried!

Adam Liette
URL:http://www.qsl.net/kb8ydx
E-Mail:kb8ydx@geocities.com



Date: Wed, 16 Jul 1997 21:11:08 +0000
From: "Lawrence R. Ware" <lrware@pipeline.com>
Subject: Research project

Good evening folks:
A project which I have been thinking about for some time has finally reached near the top of my personal queue.

I'm going to try and write a history article about the National NC-100 line and the many variations. (I know, *big* job :-)

As part of the information gathering stage, (the part I've been in for too long already :-) I need access to somebodies QST, etc. library. If we were just talking about an article or two, I'd just ask for photocopies from my many list friends.
But I need more: ad's, reviews, reports, passing mention's, etc. etc.

So tonights requests:
1) If you live in the central Florida area, and would be willing to allow me to study and photocopy parts of your old magazine collection, I would *love* to hear from you.

I hope to hunt down most of what was written during the periods both before and after WWII concerning this line of radios. Continuing through the golden days of firebottle mil surplus, until the trail peters out. I need access to someone's private library so I don't have to ask the local county library to arrange an interlibrary loan of every issue of QST from 1930 to 1955 or so... :-)
(I can hear the laughter already....)

2) If you own older National paper, especially catalogs from when National sold these radios, I would be happy to pay all copying costs, mailing costs and nuisance costs for the information.

Radios of interest include all the common NC-100 variants, and the uncommon ones like the NC-120 and NC-127. I hope to include quite a bit of information about many mil variants including: RAO's, RCP's, RCL's, RCE's, R-115's, RAS's, NRCL's, well, you get the idea.

In return I can only offer a couple of things:
Credit for your contribution to this project.
A copy e-mailed to everyone who ask's. (When it's finally done. :-)
The chance to help preserve the history of a line of classic radios.

Larry's Home for Wayward Test Equipment & Old Radios (tm)
Let your equipment retire in sunny central Florida.
Intensive Care, Private Bench Space, Frequent Use,
Factory trained HP, Tek & Fluke Surgeon on staff.
Good Home Guaranteed or double your junk back!
lrware@pipeline.com - Orlando, FL -

Date: Thu, 17 Jul 1997 12:20:15 +0200
From: wrm@ccii.co.za (Wouter de Waal)
Subject: Re: 160m xtals and

Hi all

Eric sez:

>rig but would like some 160 crystals for a more compact (and simpler) rig.

Just like the 80m TV subcarrier xtal, there's a commonly available crystal frequency somewhere in the 160m band too. 1.8something. It used to be the 8080 standard clock for some reason, I think it's the highest frequency < 2MHz that can also be divided down to give baud rate outputs. That would make it 1.8432, which does seem to ring a bell.

Or do you want to define frequencies and then have rocks cut? In that case, *never mind* :-)

And Jeff asks:

>I'm ignorant of three-phase power theory. Assuming you get three-phase AC
>out of the 480V winding,

Yes, assuming...

>what does that imply for a rectifier circuit? The

You can get a cleaner 'dirty dc' from a three phase input than from normal AC, I think the handbook actually mentions it somewhere. You would use six diodes, like in an alternator, one from each output to + and one from each output to -. Think of it as a bridge rectifier with an attitude :-)

The ripple frequency will be 180Hz and not 120, so you need slightly less capacitor.

>transformer lists for $9.99. (Item 15-1093.) At a price like that it
>would be worth some fooling around, as I'm certain you could run a 50w

Get one, reverse it and let us know :-)

Wouter, ZS1KE, FT200, KW Viceroy, nothing homebrew (yet :-)

Date: Thu, 17 Jul 1997 14:51:06 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: Re: 7117KHz at abt 9pm tonite

At 04:38 AM 7/17/97 +0000, you wrote:
>
>Hi everybody! Sorry to who ever (on the list) heard my CQ's and didn't get
>an answer. I was hearing the SW station (abt 7125) abt
>20 over and had a terrible time hearing anyone on CW.
>I don't even know who was trying to answer me. The most I ever
>got out of anyone's transmissions was my call and the DE then nothing after.
>
>So, maybe try again when the QRM (and QRN) aren't so high.
>Like I've said before, 7117 is GREATLY effected by BC stations.
>I hope no ones bought rocks for that one. I can't hear anyone at all.
        7117 very bad here due to SWBC splatter. Have had very bad luck
after 1st night tried. Personally, I'm going back to 7050-7060 part of
band. The "rock bound" people
are all there anyway.

73,
E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net
Looking for: 860 tubes, WL-460 tubes
RK-34(VT-224) tubes, Butternut HF2V antenna*

Date: Thu, 17 Jul 1997 12:03:44 -0500 (CDT)
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Antenna Distribution Amp

Well I have received permission from Vladimir Dvorkin KB9OLM to pass along
his amplifier design to the BA/GB groups.

This amp uses a single active device, a surface mount NEC NE46134 NPN
transistor. Noise figure is 1.5dB typical at 500 MHz, gain = 8dB.

I have mine configured for 5 outputs and drive anything from my Drakes,
Hammarlunds, and Nationals with no problems.

I will furnish the schematic and parts values as well as a chart showing
the resistor values for 1 to 8 outputs (50 ohms IN/OUT).

Vlad suggests making a small circuit board to mount the device on as it
should be heat sunk (collector going to a copper bus). The rest of the
parts could be regular axial jobs or surface mount. Normal operating
current drain is 100ma at 12V.

While the intermod point is -40dBm, you may need a lowpass and/or a
highpass filter in front of it, especially if you are near any BIG

transmitters.

If you want the information, just send me E-mail that says "receiver amp"
in the subject and then give me your name/address. It may be a couple
weeks before I get them out as I have a vacation coming.

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

Date: Thu, 17 Jul 1997 14:42:41 -0400 (EDT)
From: EWoodman@aol.com
Subject: Re: 7117KHz at abt 9pm tonite

> 7117 very bad here due to SWBC splatter. Have had very bad luck
>after 1st night tried. Personally, I'm going back to 7050-7060 part of
>band.

Well, I still kinda like 80 meters. I know, there's a lot of rattling,
banging, crashing, etc. But I'd rather put up with that than man-made noise!

73 Eric KA1YRV

End of glowbugs V1 #77
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